## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10|577,003
Source: IFWP
Date Processed by STIC: 5-3-06

## ENTERED



**IFWP** 

RAW SEQUENCE LISTING DATE: 05/03/2006
PATENT APPLICATION: US/10/577,003 TIME: 11:21:56

Input Set : E:\DFCI005US.txt\*

Output Set: N:\CRF4\05032006\J577003.raw

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3 <110> APPLICANT: Kharbanda, Surrender
             Kufe, Donald
      6 <120> TITLE OF INVENTION: Modulation of Interaction of MUC1 with MUC1 Ligands
     8 <130> FILE REFERENCE: DFCI:005US
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/577,003
     11 <141> CURRENT FILING DATE: 2006-04-24
W--> 13 <140> CURRENT APPLICATION NUMBER: PCT/US2004/034680
W--> 14 <141> CURRENT FILING DATE: 2006-04-24
     16 <150> PRIOR APPLICATION NUMBER: 60/514,198
     17 <151> PRIOR FILING DATE: 2003-10-24
     19 <150> PRIOR APPLICATION NUMBER: 60/519,822
     20 <151> PRIOR FILING DATE: 2003-11-12
     22 <160> NUMBER OF SEQ ID NOS: 71
     24 <170> SOFTWARE: PatentIn version 3.3
     26 <210> SEO ID NO: 1
     27 <211> LENGTH: 164
     28 <212> TYPE: PRT
     29 <213> ORGANISM: Homo sapiens
     31 <400> SEQUENCE: 1
     33 Met Thr Pro Gly Thr Gln Ser Pro Phe Phe Leu Leu Leu Leu Thr
                       5
                                           10
     37 Val Leu Thr Ala Thr Thr Ala Pro Lys Pro Ala Thr Val Val Thr Gly
                                       25
     41 Ser Gly His Ala Ser Ser Thr Pro Gly Glu Lys Glu Thr Ser Ala
                                   40
     45 Thr Gln Arg Ser Ser Val Pro Ser Ser Thr Glu Lys Asn Ala Phe Asn
     49 Ser Ser Leu Glu Asp Pro Ser Thr Asp Tyr Tyr Gln Glu Leu Gln Arg
                           70
     53 Asp Ile Ser Glu Met Phe Leu Gln Ile Tyr Lys Gln Gly Phe Leu
     57 Gly Leu Ser Asn Ile Lys Phe Arg Pro Gly Ser Val Val Val Gln Leu
                                       105
                  100
     61 Thr Leu Ala Phe Arg Glu Gly Thr Ile Asn Val His Asp Met Glu Thr
                                   120
     62 115
     65 Gln Phe Asn Gln Tyr Lys Thr Glu Ala Ala Ser Arg Tyr Asn Leu Thr
                               135
                                                   140
     69 Ile Ser Asp Val Ser Val Ser Asp Val Pro Phe Pro Phe Ser Ala Gln
                           150
     73 Ser Gly Ala Gly
     77 <210> SEQ ID NO: 2
     78 <211> LENGTH: 492
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79 <212> TYPE: DNA

Input Set : E:\DFCI005US.txt

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80 <213> ORGANISM: Homo sapiens
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83 atgacaccgg gcacccagtc teetttette etgetgetge teetcacagt gettacaget
85 accacagece ctaaaccege aacagttgtt acaggttetg gteatgeaag etetacecea
                                                                         120
87 qqtqqaqaaa aqqaqacttc ggctacccag agaagttcag tgcccagctc tactgagaag
                                                                         180
89 aatqctttta attcctctct ggaagatccc agcaccgact actaccaaga gctgcagaga
                                                                         240
91 gacatttotg asatgittit goagatttat aaacaagggg gitticiggg cototocaat
                                                                         300
93 attaagtica ggccaggatc tgtggtggta caattgactc tggccttccg agaaggtacc
                                                                         360
95 atcaatgtcc acgacatgga gacacagttc aatcagtata aaacggaagc agcctctcga
                                                                         420
                                                                         480
97 tataacctga cgatctcaga cgtcagcgtg agtgatgtgc catttccttt ctctgcccag
                                                                         492
99 tctggggctg gg
102 <210> SEQ ID NO: 3
103 <211> LENGTH: 155
104 <212> TYPE: PRT
105 <213> ORGANISM: Homo sapiens
107 <400> SEQUENCE: 3
109 Met Thr Pro Gly Thr Gln Ser Pro Phe Phe Leu Leu Leu Leu Thr
110 1
113 Val Leu Thr Val Val Thr Gly Ser Gly His Ala Ser Ser Thr Pro Gly
                                                         30
                                     25
114
                20
117 Gly Glu Lys Glu Thr Ser Ala Thr Gln Arg Ser Ser Val Pro Ser Ser
                                40
118
            35
121 Thr Glu Lys Asn Ala Phe Asn Ser Ser Leu Glu Asp Pro Ser Thr Asp
                            55
                                                 60
125 Tyr Tyr Gln Glu Leu Gln Arg Asp Ile Ser Glu Met Phe Leu Gln Ile
                        70
126 65
129 Tyr Lys Gln Gly Gly Phe Leu Gly Leu Ser Asn Ile Lys Phe Arg Pro
                    85
                                         90
133 Gly Ser Val Val Val Gln Leu Thr Leu Ala Phe Arg Glu Gly Thr Ile
                                     105
134
                100
137 Asn Val His Asp Val Glu Thr Gln Phe Asn Gln Tyr Lys Thr Glu Ala
            115
                                 120
                                                     125
141 Ala Ser Arg Tyr Asn Leu Thr Ile Ser Asp Val Ser Val Ser Asp Val
                            135
145 Pro Phe Pro Phe Ser Ala Gln Ser Gly Ala Gly
                         150
146 145
149 <210> SEQ ID NO: 4
150 <211> LENGTH: 465
151 <212> TYPE: DNA
152 <213> ORGANISM: Homo sapiens
154 <400> SEQUENCE: 4
155 atgacaccgg geacccagte teettette etgetgetge teeteacagt gettacagtt
                                                                            60
157 gttacaggtt ctggtcatgc aagctctacc ccaggtggag aaaaggagac ttcggctacc
                                                                           120
                                                                           180
159 caqaqaagtt cagtgcccag ctctactgag aagaatgctt ttaattcctc tctggaagat
161 cccagcaccg actactacca agagctgcag agagacattt ctgaaatgtt tttgcagatt
                                                                           240
163 tataaacaag ggggttttct gggcctctcc aatattaagt tcaggccagg atctgtggtg
                                                                           300
165 gtacaattga ctctggcctt ccgagaaggt accatcaatg tccacgacat ggagacacag
                                                                           360
                                                                           420
167 ttcaatcaqt ataaaacgga agcagcctct cgatataacc tgacgatctc agacgtcagc
169 gtgagtgatg tgccatttcc tttctctgcc cagtctgggg ctggg
                                                                           465
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Input Set : E:\DFCI005US.txt

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172 <210> SEQ ID NO: 5
173 <211> LENGTH: 173
174 <212> TYPE: PRT
175 <213> ORGANISM: Homo sapiens
177 <400> SEQUENCE: 5
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                           . 10
183 Val Leu Thr Val Val Thr Gly Ser Gly His Ala Ser Ser Thr Pro Gly
               20
                                   25
187 Gly Glu Lys Glu Thr Ser Ala Thr Gln Arg Ser Ser Val Pro Ser Ser
           35
                               40
191 Thr Glu Lys Asn Ala Leu Ser Thr Gly Val Ser Phe Phe Leu Ser
                           55
195 Phe His Ile Ser Asn Leu Gln Phe Asn Ser Ser Leu Glu Asp Pro Ser
                                           75
196 65
                       70
199 Thr Asp Tyr Tyr Gln Glu Leu Gln Arg Asp Ile Ser Glu Met Phe Leu
                   85
                                       90
203 Gln Ile Tyr Lys Gln Gly Gly Phe Leu Gly Leu Ser Asn Ile Lys Phe
                    105
204
               100
207 Arg Pro Gly Ser Val Val Val Gln Leu Thr Leu Ala Phe Arg Glu Gly
                               120
211 Thr Ile Asn Val His Asp Val Glu Thr Gln Phe Asn Gln Tyr Lys Thr
       130
                           135
212
215 Glu Ala Ala Ser Arg Tyr Asn Leu Thr Ile Ser Asp Val Ser Val Ser
                       150
219 Asp Val Pro Phe Pro Phe Ser Ala Gln Ser Gly Ala Gly
                   165
                                       170
220
223 <210> SEQ ID NO: 6
224 <211> LENGTH: 519
225 <212> TYPE: DNA
226 <213> ORGANISM: Homo sapiens
228 <400> SEQUENCE: 6
229 atgacaccgg gcacccagtc teetttette etgetgetge teetcacagt gettacagtt
                                                                         60
231 gttacaggtt ctggtcatgc aagctctacc ccaggtggag aaaaggagac ttcggctacc
                                                                        120
233 cagagaagtt cagtgcccag ctctactgag aagaatgctc tgtctactgg ggtctctttc
                                                                        180
235 tttttcctgt cttttcacat ttcaaacctc cagtttaatt cctctctgga agatcccagc
                                                                        240
237 accgactact accaagagct gcagagagac atttctgaaa tgtttttgca gatttataaa
                                                                        300
239 caaggggtt ttctgggcct ctccaatatt aagttcaggc caggatctgt ggtggtacaa
                                                                        360
241 ttgactctgg ccttccgaga aggtaccatc aatgtccacg acatggagac acagttcaat
                                                                        420
243 cagtataaaa cggaagcagc ctctcgatat aacctgacga tctcagacgt cagcgtgagt
                                                                        480
245 gatgtgccat ttcctttctc tgcccagtct ggggctggg
                                                                        519
248 <210> SEQ ID NO: 7
249 <211> LENGTH: 140
250 <212> TYPE: PRT
251 <213> ORGANISM: Homo sapiens
253 <400> SEQUENCE: 7
255 Met Thr Pro Gly Thr Gln Ser Pro Phe Phe Leu Leu Leu Leu Thr
259 Val Leu Thr Val Val Thr Gly Ser Gly His Ala Ser Ser Thr Pro Gly
```

Input Set : E:\DFCI005US.txt

```
260
                20
                                    25
263 Gly Glu Lys Glu Thr Ser Ala Thr Gln Arg Ser Ser Val Pro Ser Thr
                                40
267 Asp Tyr Tyr Gln Glu Leu Gln Arg Asp Ile Ser Glu Met Phe Leu Gln
271 Ile Tyr Lys Gln Gly Gly Phe Leu Gly Leu Ser Asn Ile Lys Phe Arg
                                            272-65
'275 Fro Gly Ser Val Val Val Gln Leu Thr Leu Ala Phe Arg Glu Gly 'Thr
                    85
                                        90
279 Ile Asn Val His Asp Val Glu Thr Gln Phe Asn Gln Tyr Lys Thr Glu
                100
                                    105
283 Ala Ala Ser Arg Tyr Asn Leu Thr Ile Ser Asp Val Ser Val Ser Asp
                                120
     115
287 Val Pro Phe Pro Phe Ser Ala Gln Ser Gly Ala Gly
                            135
        130
291 <210> SEQ ID NO: 8
292 <211> LENGTH: 420
293 <212> TYPE: DNA
294 <213> ORGANISM: Homo sapiens
                                                                           ***
296 <400> SEQUENCE: 8
                                                                          60
297 atqacaccqq qcacccagtc teetttette etgetgetge teetcacagt gettacagtt
299 gttacaggtt ctggtcatgc aagctctacc ccaggtggag aaaaggagac ttcggctacc
                                                                         120
301 cagagaagtt cagtgcccag caccgactac taccaagagc tgcagagaga catttctgaa
                                                                         180
303 atqtttttqc aqatttataa acaagggggt tttctgggcc tctccaatat taagttcagg
                                                                         240
305 ccaqqatctq tqqtqqtaca attgactctg gccttccgag aaggtaccat caatgtccac
                                                                         300
                                                                         360
307 gacatggaga cacagttcaa tcagtataaa acggaagcag cctctcgata taacctgacg
309 atctcagacg tcagcgtgag tgatgtgcca tttcctttct ctgcccagtc tggggctggg
                                                                         420
312 <210> SEQ ID NO: 9
313 <211> LENGTH: 130
314 <212> TYPE: PRT
315 <213> ORGANISM: Homo sapiens
317 <400> SEQUENCE: 9
319 Met Thr Pro Gly Thr Gln Ser Pro Phe Phe Leu Leu Leu Leu Thr
                                        10
320 1
323 Val Leu Thr Val Val Thr Gly Ser Gly His Ala Ser Ser Thr Pro Gly
                                    25
327 Gly Glu Lys Glu Thr Ser Ala Thr Gln Arg Ser Ser Val Pro Ser Ser
            35
                                40
331 Thr Glu Lys Asn Ala Ile Pro Ala Pro Thr Thr Lys Ser Cys Arg
335 Glu Thr Phe Leu Lys Trp Pro Gly Ser Val Val Gln Leu Thr Leu
                                            75
339 Ala Phe Arg Glu Gly Thr Ile Asn Val His Asp Val Glu Thr Gln Phe
                                        90
                    85
343 Asn Gln Tyr Lys Thr Glu Ala Ala Ser Arg Tyr Asn Leu Thr Ile Ser
                                    105
                100
347 Asp Val Ser Val Ser Asp Val Pro Phe Pro Phe Ser Ala Gln Ser Gly
                                120
351 Ala Gly
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Input Set : E:\DFCI005US.txt

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352
        130
355 <210> SEQ ID NO: 10
356 <211> LENGTH: 390
357 <212> TYPE: DNA
358 <213 > ORGANISM: Homo sapiens
360 <400> SEQUENCE: 10
361 atgacaccgg gcacccagte techticite etgetgetge tectcacagt gettacagtt 🗻
                                                                           60 .
363 qttacaqqtt ctqqtcatqc aagctctacc ccaggtggag aaaaggagac ttcggctacc
                                                                           120
365 cagagaagtt cagtgcccag ctctactgag aagaatgcta tcccagcacc gactactacc
                                                                          180
367 aagagetgea gagagacatt tetgaaatgg eeaggatetg tggtggtaca attgaetetg
                                                                          240
369 qccttccqaq aaqqtaccat caatqtccac gacatggaga cacagttcaa tcagtataaa
                                                                          300
371 acggaagcag cctctcgata taacctgacg atctcagacg tcagcgtgag tgatgtgcca
                                                                          360
373 tttcctttct ctgcccagtc tggggctggg
                                                                          390
376 <210> SEQ ID NO: 11
377 <211> LENGTH: 102
378 <212> TYPE: PRT
379 <213> ORGANISM: Homo sapiens
381 <400> SEQUENCE: 11
383 Phe Asn Ser Ser Lea Glu Asp Pro Ser Thr Asp Tyr Tyr Gln Glu Lea
                                         10
384 1
387 Gln Arg Asp Ile Ser Glu Met Phe Leu Gln Ile Tyr Lys Gln Gly Gly
388
391 Phe Leu Gly Leu Ser Asn Ile Lys Phe Arg Pro Gly Ser Val Val Val
392
            35
                                 40
395 Gln Leu Thr Leu Ala Phe Arg Glu Gly Thr Ile Asn Val His Asp Val
399 Glu Thr Gln Phe Asn Gln Tyr Lys Thr Glu Ala Ala Ser Arg Tyr Asn
                        70
403 Leu Thr Ile Ser Asp Val Ser Val Ser Asp Val Pro Phe Pro Phe Ser
404
407 Ala Gln Ser Gly Ala Gly
408
                100
411 <210> SEQ ID NO: 12
412 <211> LENGTH: 306
413 <212> TYPE: DNA
414 <213> ORGANISM: Homo sapiens
416 <400> SEQUENCE: 12
417 tttaatteet etetggaaga teecageace gaetaetaee aagagetgea gagagaeatt
                                                                            60
419 totgaaatgt ttttgcagat ttataaacaa gggggttttc tgggcctctc caatattaag
                                                                           120
                                                                           180
421 ttcaggccag gatctgtggt ggtacaattg actctggcct tccgagaagg taccatcaat
423 gtccacgaca tggagacaca gttcaatcag tataaaacgg aagcagcctc tcgatataac
                                                                           240
425 ctgacgatct cagacgtcag cgtgagtgat gtgccatttc ctttctctgc ccagtctggg
                                                                           300
                                                                           306
427 gctggg
430 <210> SEQ ID NO: 13
431 <211> LENGTH: 375
432 <212> TYPE: PRT
433 <213> ORGANISM: Homo sapiens
435 <400> SEQUENCE: 13
437 Met Thr Pro Gly Thr Gln Ser Pro Phe Phe Leu Leu Leu Leu Thr
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20%

Input Set : E:\DFCI005US.txt

Output Set: N:\CRF4\05032006\J577003.raw

## Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68 Seq#:69,70,71 VERIFICATION SUMMARY

DATE: 05/03/2006

PATENT APPLICATION: US/10/577,003

TIME: 11:21:57

Input Set : E:\DFCI005US.txt

Output Set: N:\CRF4\05032006\J577003.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number

L:13 M:280 W: Numeric Identifier already exists, <140> found multiple times

L:13 M:281 W: Numeric Fields not Ordered, <140> not ordered!.

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number

L:14 M:280 W: Numeric Identifier already exists, <141> found multiple times

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date

5/3/2006